



Silfluo LS-M53

Trifluoropropyl Functional Silane

Description

Silfluo LS-M53 is (3,3,3-Trifluoropropyl)trimethoxysilane, a fluoroalkyl-functional trimethoxysilane.

The molecule contains one trifluoropropyl group and three hydrolyzable methoxy groups.

The trifluoropropyl group introduces fluorinated organic character into siloxane structures.

The trimethoxysilyl group hydrolyzes and condenses with hydroxylated inorganic surfaces or participates in siloxane polymerization under suitable conditions.

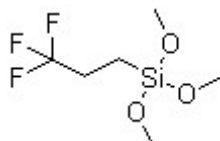
Used as monomer for fluorosilicone fluid and FVMQ elastomer synthesis, and as surface modifier or coupling agent in fluoroalkyl-modified coating and composite systems.

Performance equivalent to Dow Z-6233 . OFS-6233 and Shin-Etsu KBM-7103.

Typical Physical Properties

Silfluo Code:	LS-M53
Chemical Name:	(3,3, 3-trifluoropropyl)trimethoxysilane
Synonyms	Trimethoxy(3,3,3-trifluoropropyl)silane
CAS No. :	429-60-7
EINECS No. :	207-059-3
Molecular Weight:	218.25
Appearance:	Colorless transparent liquid
Purity (by GC, %)	99.0 min
Density ($\rho_{20^{\circ}\text{C}}$, g/cm ³)	1.142
Refractive Index ($n_{25.D}$)	1.355±0.005
Boiling Point:	144°C
Flash Point:	38 °C Closed Cup

Chemical Structure:



Applications

1. Fluorosilicone fluid and FVMQ elastomer synthesis

Used as monomer for fluorosilicone fluid and fluorosilicone rubber (FVMQ) synthesis.

2. Low-refractive-index optical coatings

Used in silicone optical coating formulations requiring low refractive index.

3. Surface modification

Used as surface treatment agent for glass, ceramic, and metal oxide substrates.

Technical Data Sheet



www.silfluosilicone.com

4. Fluoropolymer composite coupling

Used as coupling agent for bonding silica and glass fiber into fluoropolymer matrices.

Packaging

In 500g, 1000g, 25kg pail, 200kg drum.

Safety and Storage

Keep in a cool and dry place and avoid storage in direct sunlight. Shelf life is min. 9 months. It is shipped as hazardous substance.